

SEQUENCE LISTING

<110> Li, Yi  
Ruben, Steven M.

<120> Human G-Protein Coupled Receptors

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<150> 08/852,824

<151> 1997-05-07

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<170> PatentIn Ver. 2.0

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ttaaaaggaa aataccagat gccactctgc aggctgcaat aactactact tactggatac 180

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Met Gln Ala Val

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gac aat ctc acc tct gcg cct ggg aac acc agt ctg tgc acc aga gac 285

Asp Asn Leu Thr Ser Ala Pro Gly Asn Thr Ser Leu Cys Thr Arg Asp

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Tyr Lys Ile Thr Gln Val Leu Phe Pro Leu Leu Tyr Thr Val Leu Phe	
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Phe Val Gly Leu Ile Thr Asn Gly Leu Ala Met Arg Ile Phe Phe Gln	
40 45 50	
atc cgg agt aaa tca aac ttt att att ttt ctt aag aac aca gtc att	429
Ile Arg Ser Lys Ser Asn Phe Ile Ile Phe Leu Lys Asn Thr Val Ile	
55 60 65	
tct gat ctt ctc atg att ctg act ttt cca ttc aaa att ctt agt gat	477
Ser Asp Leu Leu Met Ile Leu Thr Phe Pro Phe Lys Ile Leu Ser Asp	
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gcc aaa ctg gga aca gga cca ctg aga act ttt gtg tgt caa gtt acc	525
Ala Lys Leu Gly Thr Gly Pro Leu Arg Thr Phe Val Cys Gln Val Thr	
85 90 95 100	
tcc gtc ata ttt tat ttc aca atg tat atc agt att tca ttc ctg gga	573
Ser Val Ile Phe Tyr Phe Thr Met Tyr Ile Ser Ile Ser Phe Leu Gly	
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ctg ata act atc gat cgc tac cag aag acc acc agg cca ttt aaa aca	621
Leu Ile Thr Ile Asp Arg Tyr Gln Lys Thr Thr Arg Pro Phe Lys Thr	
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Ser Asn Pro Lys Asn Leu Leu Gly Ala Lys Ile Leu Ser Val Val Ile	
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Trp Ala Phe Met Phe Leu Leu Ser Leu Pro Asn Met Ile Leu Thr Asn	
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Arg Gln Pro Arg Asp Lys Asn Val Lys Lys Cys Ser Phe Leu Lys Ser	
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Glu Phe Gly Leu Val Trp His Glu Ile Val Asn Tyr Ile Cys Gln Val  
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Val Pro Arg Lys Lys Val Asn Val Lys Val Phe Ile Ile Ile Ala Val  
230 235 240

ttc ttt att tgt ttt gtt cct ttc cat ttt gcc cga att cct tac acc 1005  
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245 250 255 260

ctg agc caa acc cgg gat gtc ttt gac tgc act gct gaa aat act ctg 1053  
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325 330 335 340

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Pro Met

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Ile Phe Phe Gln Ile Arg Ser Lys Ser Asn Phe Ile Ile Phe Leu Lys			
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Asn Thr Val Ile Ser Asp Leu Leu Met Ile Leu Thr Phe Pro Phe Lys			
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Ile Leu Ser Asp Ala Lys Leu Gly Thr Gly Pro Leu Arg Thr Phe Val			
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Ser Phe Leu Gly Leu Ile Thr Ile Asp Arg Tyr Gln Lys Thr Thr Arg			
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Ser Val Val Ile Trp Ala Phe Met Phe Leu Leu Ser Leu Pro Asn Met			
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Phe Leu Lys Ser Glu Phe Gly Leu Val Trp His Glu Ile Val Asn Tyr			
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Ile Cys Gln Val Ile Phe Trp Ile Asn Phe Leu Ile Val Ile Val Cys			
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Tyr Thr Leu Ile Thr Lys Glu Leu Tyr Arg Ser Tyr Val Arg Thr Arg			
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Gly Val Gly Lys Val Pro Arg Lys Lys Val Asn Val Lys Val Phe Ile  
225 230 235 240

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245 250 255

Ile Pro Tyr Thr Leu Ser Gln Thr Arg Asp Val Phe Asp Cys Thr Ala  
260 265 270

Glu Asn Thr Leu Phe Tyr Val Lys Glu Ser Thr Leu Trp Leu Thr Ser  
275 280 285

Leu Asn Ala Cys Leu Asp Pro Phe Ile Tyr Phe Phe Leu Cys Lys Ser  
290 295 300

Phe Arg Asn Ser Leu Ile Ser Met Leu Lys Cys Pro Asn Ser Ala Thr  
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Leu Ser Val Ala Ala Ser Cys Leu Val Val Leu Glu Asn Leu Leu Val			
	55	60	65
ctg gcg gcc atc acc agc cac atg cgg tcg caa cgc tgg gtc tac tat			298
Leu Ala Ala Ile Thr Ser His Met Arg Ser Gln Arg Trp Val Tyr Tyr			
	70	75	80
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Cys Leu Val Asn Ile Thr Met Ser Asp Leu Leu Thr Gly Ala Ala Tyr			
	85	90	95
ctg gcc aac gtg ctg ctg tcg ggg gcc cgc acc ttc cgt ctg gcg ccc			394
Leu Ala Asn Val Leu Leu Ser Gly Ala Arg Thr Phe Arg Leu Ala Pro			
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gcc cag tgg ttc cta cgg aag ggc ctg ctc ttc acc gcc ctg gcc gcc			442
Ala Gln Trp Phe Leu Arg Lys Gly Leu Leu Phe Thr Ala Leu Ala Ala			
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Ser Thr Phe Ser Leu Leu Phe Thr Ala Gly Leu Arg Phe Ala Thr Met			
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Val Arg Pro Val Ala Glu Ser Gly Ala Thr Lys Thr Ser Arg Val Tyr			
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Gly Phe Ile Gly Leu Cys Trp Leu Leu Ala Ala Leu Leu Gly Met Leu			
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200 205 210

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Arg Leu Val Gln Ala Ser Gly Gln Lys Ala Pro Arg Pro Ala Ala Arg  
230 235 240

cgc aag gcc cgc cgc ctg ctg aag acg gtg ctg atg atc ctg ctg gcc 826  
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Cys Gly Cys Leu Arg Leu Gly Met Arg Gly Pro Gly Asp Cys Leu Ala  
325 330 335



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Arg Ala Val Glu Ala His Ser Gly Ala Ser Thr Thr Asp Ser Ser Leu  
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Arg Pro Arg Asp Ser Phe Arg Gly Ser Arg Ser Leu Ser Phe Arg Met  
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Arg Glu Pro Leu Ser Ser Ile Ser Ser Val Arg Ser Ile  
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65 70 75 80

Val Tyr Tyr Cys Leu Val Asn Ile Thr Met Ser Asp Leu Leu Thr Gly  
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Ala Ala Tyr Leu Ala Asn Val Leu Leu Ser Gly Ala Arg Thr Phe Arg  
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130 135 140

Ala Thr Met Val Arg Pro Val Ala Glu Ser Gly Ala Thr Lys Thr Ser  
145 150 155 160

Arg Val Tyr Gly Phe Ile Gly Leu Cys Trp Leu Leu Ala Ala Leu Leu  
165 170 175

Gly Met Leu Pro Leu Leu Gly Trp Asn Cys Leu Cys Ala Phe Asp Arg  
180 185 190

Cys Ser Ser Leu Leu Pro Leu Tyr Ser Lys Arg Tyr Ile Leu Phe Cys  
195 200 205

Leu Val Ile Phe Ala Gly Val Leu Ala Thr Ile Met Gly Leu Tyr Gly  
210 215 220

Ala Ile Phe Arg Leu Val Gln Ala Ser Gly Gln Lys Ala Pro Arg Pro  
225 230 235 240

Ala Ala Arg Arg Lys Ala Arg Arg Leu Leu Lys Thr Val Leu Met Ile  
245 250 255

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260 265 270

Ala Asp Val Phe Gly Ser Asn Leu Trp Ala Gln Glu Tyr Leu Arg Gly  
275 280 285

Met Asp Trp Ile Leu Ala Leu Ala Val Leu Asn Ser Ala Val Asn Pro  
290 295 300

Ile Ile Tyr Ser Phe Arg Ser Arg Glu Val Cys Arg Ala Val Leu Ser  
305 310 315 320

Phe Leu Cys Cys Gly Cys Leu Arg Leu Gly Met Arg Gly Pro Gly Asp  
325 330 335

Cys Leu Ala Arg Ala Val Glu Ala His Ser Gly Ala Ser Thr Thr Asp  
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50 55 60  
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85 90 95  
Gly Asp Ala Leu Cys Arg Ile Thr Ala Leu Val Phe Tyr Ile Asn Thr  
100 105 110  
Tyr Ala Gly Val Asn Phe Met Thr Cys Leu Ser Ile Asp Arg Phe Ile  
115 120 125

Ala Val Val His Pro Leu Arg Tyr Asn Lys Ile Lys Arg Ile Glu His  
130 135 140

Ala Lys Gly Val Cys Ile Phe Val Trp Ile Leu Val Phe Ala Gln Thr  
145 150 155 160

Leu Pro Leu Leu Ile Asn Pro Met Ser Lys Gln Glu Ala Glu Arg Ile  
165 170 175

Thr Cys Met Glu Tyr Pro Asn Phe Glu Glu Thr Lys Ser Leu Pro Trp  
180 185 190

Ile Leu Leu Gly Ala Cys Phe Ile Gly Tyr Val Leu Pro Leu Ile Ile  
195 200 205

Ile Lys Ile Cys Tyr Ser Gln Ile Cys Cys Lys Leu Phe Arg Thr Ala  
210 215 220

Lys Gln Asn Pro Leu Thr Glu Lys Ser Gly Val Asn Lys Lys Ala Leu  
225 230 235 240

Asn Thr Ile Ile Leu Ile Ile Val Val Phe Val Leu Cys Phe Thr Pro  
245 250 255

Tyr His Val Ala Ile Ile Gln His Met Ile Lys Lys Leu Arg Phe Ser  
260 265 270

Asn Phe Leu Glu Cys Ser Gln Arg His Ser Phe Gln Ile Ser Leu His  
275 280 285

Phe Thr Val Cys Leu Met Asn Phe Asn Cys Cys Met Asp Pro Phe Ile  
290 295 300

Tyr Phe Phe Ala Cys Lys Gly Tyr Lys Arg Lys Val Met Arg Met Leu  
305 310 315 320

Lys Arg Gln Val Ser Val Ser Ile Ser Ser Ala Val Lys Ser Ala Pro  
325 330 335

Glu Glu Asn Ser Arg Glu Met Thr Glu Thr Gln Met  
340 345

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 35 40 45

Ser Val Val Phe Ile Leu Ile Cys Cys Phe Ile Ile Leu Glu Asn Ile  
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Phe Val Leu Leu Thr Ile Trp Lys Thr Lys Lys Phe His Arg Pro Met  
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Tyr Tyr Phe Ile Gly Asn Leu Ala Leu Ser Asp Leu Leu Ala Gly Val  
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Ala Tyr Thr Ala Asn Leu Leu Leu Ser Gly Ala Thr Thr Tyr Lys Leu  
 100 105 110

Thr Pro Ala Gln Trp Phe Leu Arg Glu Gly Ser Met Phe Val Ala Leu  
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Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile Glu Arg Tyr Ile  
 130 135 140

Thr Met Leu Lys Met Lys Leu His Asn Gly Ser Asn Asn Phe Arg Leu  
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Phe Leu Leu Ile Ser Ala Cys Trp Val Ile Ser Leu Ile Leu Gly Gly  
 165 170 175



Leu Pro Ile Met Gly Trp Asn Cys Ile Ser Ala Leu Ser Ser Cys Ser  
180 185 190

Thr Val Leu Pro Leu Tyr His Lys His Tyr Ile Leu Phe Cys Thr Thr  
195 200 205

Val Phe Thr Leu Leu Leu Leu Ser Ile Val Ile Leu Tyr Cys Arg Ile  
210 215 220

Tyr Ser Leu Val Arg Thr Arg Ser Arg Arg Leu Thr Phe Arg Lys Asn  
225 230 235 240

Ile Ser Lys Ala Ser Arg Ser Ser Glu Asn Val Ala Leu Leu Lys Thr  
245 250 255

Val Ile Ile Val Leu Ser Val Phe Ile Ala Cys Trp Ala Pro Leu Phe  
260 265 270

Ile Leu Leu Leu Leu Asp Val Gly Cys Lys Val Lys Thr Cys Asp Ile  
275 280 285

Leu Phe Arg Ala Glu Tyr Phe Leu Val Leu Ala Val Leu Asn Ser Gly  
290 295 300

Thr Asn Pro Ile Ile Tyr Thr Leu Thr Asn Lys Glu Met Arg Arg Ala  
305 310 315 320

Phe Ile Arg Ile Met Ser Cys Cys Lys Cys Pro Ser Gly Asp Ser Ala  
325 330 335

Gly Lys Phe Lys Arg Pro Ile Ile Ala Gly Met Glu Phe Ser Arg Ser  
340 345 350

Lys Ser Asp Asn Ser Ser His Pro Gln Lys Asp Glu Gly Asp Asn Pro  
355 360 365

Glu Thr Ile Met Ser Ser Gly Asn Val Asn Ser Ser Ser  
370 375 380